

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A catheter, comprising:

a proximal shaft defining a guidewire lumen and an inflation lumen, ~~wherein said inflation lumen is arcuate shaped and reinforced with a tube having an arcuate shaped cross-section;~~

a distal shaft wherein said distal shaft has a greater flexibility than said proximal shaft; and

a transition section having a proximal end, a distal end and an inflation lumen, said proximal end communicating with said proximal shaft and said distal end communicating with said distal shaft, wherein said transition section has a spiral helix at least partially free-floating within said inflation lumen to provide a gradually increased flexibility from said proximal end to said distal end thereof wherein subsequent windings of said spiral helix are closer together at said proximal end of said transition section and farther apart at said distal end of said transition section.

Claims 2- 3 (canceled).

Claim 4 (previously presented): The catheter of claim 1, wherein an outer surface of said spiral helix is positioned against an interior surface of said transition section.

Claims 5 and 6 (canceled).

Claim 7 (previously presented): The catheter of claim 1, wherein said spiral helix is made from one of a metal ribbon or metal wire.

Claim 8 (previously presented): The catheter of claim 1, wherein said spiral helix is made from a thermoplastic polymer.

Claim 9 (canceled).

Claim 10 (original): The catheter of claim 1, wherein said proximal shaft has a longitudinal cut along its length, said longitudinal cut extending in a radial direction between an exterior surface of said proximal shaft and said guidewire lumen.

Claim 11 (original): The catheter of claim 10, wherein said longitudinal cut extends distally into said transition section.

Claims 12-33 (canceled).

Claim 34 (previously presented): The catheter of claim 1, wherein said distal shaft has a first diameter in said transition section that reduces to a smaller second diameter at a distal end of said spiral helix.

Claim 35 (previously presented): The catheter of claim 34, wherein said second diameter is less than a diameter of said spiral helix.

Claim 36 (previously presented): A catheter, comprising:
a proximal shaft defining a guidewire lumen and an inflation lumen;
a distal shaft having an inner shaft that defines a guidewire lumen and an outer shaft, such that an inflation lumen is defined between an inner surface of the outer shaft and an outer surface of the inner shaft; and
a spiral helix at least partially free-floating within the inflation lumen of the distal shaft and positioned proximate a distal end of the proximal shaft, wherein subsequent windings of the spiral helix are closer together at a proximal end and farther apart at a distal end thereof to provide the catheter with a flexibility transition.

Claim 37 (previously presented): The catheter of claim 36, wherein an outer surface of the spiral helix is positioned against the inner surface of the outer shaft.

Claim 38 (canceled).

Claim 39 (previously presented): A catheter, comprising:
a proximal shaft defining a guidewire lumen and an inflation lumen;
a distal shaft having an inner shaft that defines a guidewire lumen and an outer shaft, such that an inflation lumen is defined between an inner surface of the outer shaft and an outer surface of the inner shaft; and
a spiral helix at least partially free-floating within the inflation lumen of the distal shaft and positioned proximate a distal end of the proximal shaft, wherein the spiral helix

provides the catheter with a flexibility transition from a proximal end to a distal end of the spiral helix and wherein the outer shaft has a first diameter that reduces to a second diameter adjacent the distal end of the spiral helix.

Claim 40 (previously presented): The catheter of claim 39, wherein the second diameter of the outer shaft is less than a diameter of the spiral helix.